

011404  
069690

U.S.PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY  
PATENT APPLICATION  
TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	08212/0200386-US0
First Inventor	Bing Wang
Title	FAST RULE LOOKUP WITH ARBITRARY IP RANGE CONFIGURATIONS
Express Mail Label No.	EV398894034US

22387 U.S.PTO  
10/757801011404  
Barcode

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages **18**]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C. 113) [Total Sheets **5**]
5. Oath or Declaration [Total Sheets **3**]
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
    - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

<b>ADDRESS TO:</b>		MS Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
<p>7. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)</p> <p>8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)</p> <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> Computer Readable Form (CRF)</li> <li>b. Specification Sequence Listing on:           <ol style="list-style-type: none"> <li>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or</li> <li>ii. <input type="checkbox"/> Paper</li> </ol> </li> <li>c. <input type="checkbox"/> Statements verifying identity of above copies</li> </ol>		
<b>ACCOMPANYING APPLICATION PARTS</b>		
<ol style="list-style-type: none"> <li>9. <input checked="" type="checkbox"/> Assignment Papers (cover sheet &amp; document(s))</li> <li>10. <input type="checkbox"/> 37 CFR 3.73(b) Statement (when there is an assignee) <input type="checkbox"/> Power of Attorney</li> <li>11. <input type="checkbox"/> English Translation Document (if applicable)</li> <li>12. <input type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations</li> <li>13. <input type="checkbox"/> Preliminary Amendment</li> <li>14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)</li> <li>15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)</li> <li>16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.</li> <li>17. <input checked="" type="checkbox"/> Other: <b>Certificate of Express Mailing</b></li> </ol>		

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

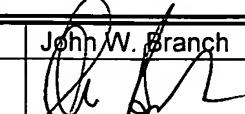
 Continuation     Divisional     Continuation-in-part (CIP)    of prior application No.: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

<input checked="" type="checkbox"/> Customer Number: <b>38879</b>	<input type="checkbox"/> OR	<input type="checkbox"/> Correspondence address below		
Name	DARBY & DARBY P.C. John W. Branch			
Address	P.O. Box 5257			
City	New York	State	NY	Zip Code
Country	US	Telephone	(206) 262-8900	Fax

Name (Print/Type)	John W. Branch	Registration No. (Attorney/Agent)	41,633
Signature			Date
			January 14, 2004

05906  
011404

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003, Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 828.00)

## Complete if Known

Application Number	Not Yet Assigned
Filing Date	Concurrently Herewith
First Named Inventor	Bing Wang
Examiner Name	Not Yet Assigned
Art Unit	N/A

Attorney Docket No. 08212/0200386-US0

## METHOD OF PAYMENT (check all that apply)

 Check  Credit Card  Money Order  Other  None
 Deposit Account:

Deposit Account Number 04-0100

Deposit Account Name Darby &amp; Darby P.C.

The Director is authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION (continued)

## 3. ADDITIONAL FEES

## Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	770.00
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1) (\$)		770.00			

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	21	-20** = 1 x 18.00 = 18.00	18.00
Independent Claims	3	-3** = 0 x 0.00 = 0.00	0.00
Multiple Dependent			

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2) (\$)		18.00		

\*\* or number previously paid, if greater; For Reissues, see above

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 40.00)

(Complete if applicable)					
Name (Print/Type)	John W. Branch	Registration No. (Attorney/Agent)	41,633	Telephone	(206) 262-8900
Signature				Date	January 14, 2004

Express Mail Label No. EV398894034US Dated: January 14, 2004

Application No. (if known):

Attorney Docket No.: 08212/0200386-US0

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV398894034US in an envelope addressed to:

MS Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on January 14, 2004  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
John W. Branch

\_\_\_\_\_  
Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Utility Patent Application Transmittal (1 page)  
Fee Transmittal (1 page)  
Certificate of Express Mailing (1 page)  
Application Data Sheet (2 pages)  
Check in the amount of \$828.00  
Assignment papers (3 pages)  
Oath or declaration (3 pages)  
Specification (18 pages)  
5 drawings (5 sheets; Figs. 1, 2A-2C, 3A-3B, 4 and 5)